

**Thornton Creek Water Quality Channel  
30% Design Resolution Team**

**Workshop #1**

**Wednesday, December 7**

Summary of Design Issues

Maintenance

- Ensure maintenance staff access
- Discourage public access where appropriate

Design Commission

- Mitigate ERA Care pinch points
- Highlight urban/natural interface
- Surface elements/landscape more developed
- Pedestrian experience more developed

Stakeholders

1. pedestrian access, specifically to include a stairwell from 100th
2. design features of the water quality channel, which include:
  - evaluate and explain the visual access to flowing water from pedestrian paths
  - what are the pros and cons of lining the low-flow channel with an impervious clay material?
  - discuss the loss of the 3 in-channel weirs and evaluate detention capacity has been lost
  - the level spreaders should perhaps be made of wood or other more natural materials, not concrete
  - suggest an outside peer review or value engineering process around costs
  - evaluate and explain how water temperatures in the water quality channel will be kept cool via shading

Design Team

- Emphasize pedestrian focal point at Lorig/ERA Care crossroads
- Evaluate opportunities to enhance bio-retention and views of water
- Examine structural earth wall constructability issues and opportunities
- Introduce variability in grading and channel walls
- Improve pedestrian experience/aesthetics
- Examine weirs and level spreader concepts
- Increase ponding area behind spreaders and reduce number of spreaders
- Better define Phase 1 & Phase 2
- Refine pathway materials (keep in mind need for smoothness for residents and means of deterring skateboards)

- Refine Cascade design
- Examine urban/natural design approach
- Strengthen NE corner
- Evaluate 2 pedestrian access options
- Channel plant selection, including establishing roughness coefficient

#### Parameters

- Maintain vector access
- Safety - Maintain safe staff access, while restricting/discouraging public access where appropriate
- Aim for gradual slopes 2:1 or 3:1
- Document water quality assumptions, methods and parameters
- Consider monitoring program approach

#### Information Needs

- Maintenance frequencies
- Channel maintenance design needs – surfaces, etc.

FYI

- Lorig and Era Care want to connect to 60" pipe in area of 2<sup>nd</sup> Diversion Structure